

### Sheldon P. Hayes Collects Cold-Blooded Vertebrates in Arizona

In the spring of 1938 Mr. Sheldon P. Hayes, while teaching at the Gila Junior College in Thatcher, Graham County, Arizona, collected many interesting species of fishes and reptiles. Some of these he contributed to the herpetological collection of the Brigham Young University. Because many of these represent new records from this region for our collection, it is deemed advisable to make the following report on some of the rare species.

#### FISHES

##### *Agosia chrysogaster* Girard

There are 78 well-preserved specimens of this cyprinid in the collection. Many of the specimens are well colored, having a dark lateral band anteriorly above the lateral line but posteriorly on the lateral line and terminating in a dark spot at the base of the caudal fin. Dorsally the specimens are dark with a median dark stripe. Below the lateral line all the specimens are yellowish white. The teeth are 4—4, pointed and curved, without a grinding surface. The dorsal and lateral portions of the head of the males are covered with small tubercles. The measurements of the following specimens are given in millimeters; these and the scale counts were made with the aid of the binocular microscope:

Museum No.	4223	4224	4225	4226	4227	4228	4229
Sex	♂	♀	♀	♂	♀	♀	♀
Length	58	65	53	51.2	57	59	55
Head	14.5	16	13	13.5	14	15	13
Scales	18-87-14	18-93-14	17-85-14	17-86-14	17-85-14	18-90-14	18-83-14
Eyes	3	4	2.8	3	3	3	3
Depth	14	16	13	11.5	13.3	13.7	12.5
Dorsal	1-8	1-8	1-8	1-8	1-8	1-8	1-8
Anal.	1-7	1-7	1-7	1-7	1-7	1-7	1-7

#### SNAKES

*Salvadora grahamiae hexalepis* (Cope)

*Arizona elegans occidentalis* Blanchard

*Thamnophis eques* (Reuss)

*Thamnophis marcianus* (Baird and Girard)

*Tantilla wilcoxi* Stejneger

*Micruroides euryxanthus* (Kennicott)

*Crotalus viridis viridis* Rafinesque.—V. M. T.